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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,676	07/03/2001	Michael J. Perani	07844-506001	1749

21876 7590 08/27/2003

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EXAMINER

WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 08/27/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/898,676

Applicant(s)

PERANI ET AL.

Examiner

Scott Wallace

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-22 is/are rejected.
- 7) ☒ Claim(s) 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-9 and 13-22 are rejected under 35 U.S.C. 102(a) as being anticipated by MAYA Complete 2.

3. As per claim 1, Maya discloses a computer program product for performing computer graphics operations on an image represented by digital data, the product tangibly embodied in a computer-readable medium or propagated signal, the product comprising instructions operable to cause a programmable processor (page xxii – xxiii) to: receive a representation of a digital image (pg 382, third paragraph), the image comprising drawing objects organized in a hierarchical relationship (page 397, fig); receive a user input defining an envelope having an outline (page 382 3<sup>rd</sup> and 4<sup>th</sup> paragraph), the envelope containing a first original drawing object in the image (page 382, 3<sup>rd</sup> paragraph), the envelope being a manipulable graphic object defining a coordinate remapping (page 382, 3<sup>rd</sup> paragraph), the coordinate remapping being applied to generate a resulting drawing object for any original drawing object contained in the envelope (page 382, 3<sup>rd</sup> paragraph), the first original and its resulting drawing object each being a vector object (page 382, 3<sup>rd</sup> paragraph); wherein the envelope has an interior control point that is an anchor point interior to the envelope outline (page 393, fig), the product further comprising instructions to: receive a user input manipulating the interior control point and, in response, redefine the coordinate remapping (page 383, 1<sup>st</sup> paragraph).

4. As per claim 2, MAYA discloses wherein the interior control point is a lattice point having four tangents (page 396, fig d).

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5. As per claim 3, MAYA discloses wherein the interior control point is not a lattice point and has two tangents (page 399, fig).

6. As per claim 4, MAYA discloses a computer product for performing computer graphics operations on an image represented by digital data, the product tangibly embodied in a computer-readable medium or propagated signal, the product comprising instructions operable to cause a programmable processor (page xxii-xxiii) to: receive a representation of a digital image (pg 382, 3<sup>rd</sup> paragraph), the image comprising drawing objects organized in a hierarchical relationship (page 397, fig); receive a user input defining an envelope having an outline (page 382, 3<sup>rd</sup> and 4<sup>th</sup> paragraph), the envelope containing a first original drawing object in the image (page 382, 3<sup>rd</sup> paragraph), the envelope being a manipulable graphic object defining a coordinate remapping (page 382, 3<sup>rd</sup> paragraph), the coordinate remapping being applied to generate a resulting drawing object for any original drawing object contained in the envelope (page 382, 3<sup>rd</sup> paragraph), the first original and its resulting drawing object each being a vector object (page 382, 3<sup>rd</sup> paragraph); receive from a user a precision input signifying how closely an object contained in the envelope will follow the envelope when the corresponding resulting object is generated and, in response, introduce additional control points to the original contained object if necessary to achieve the precision before applying the coordinate remapping (page 382).

7. As per claim 5, MAYA discloses Maya discloses a computer program product for performing computer graphics operations on an image represented by digital data, the product tangibly embodied in a computer-readable medium or propagated signal, the product comprising instructions operable to cause a programmable processor (page xxii – xxiii) to: receive a representation of a digital image (pg 382, third paragraph), the image comprising drawing objects organized in a hierarchical relationship (page 397, fig); receive a user input defining an envelope having an outline (page 382 3<sup>rd</sup> and 4<sup>th</sup> paragraph), the envelope containing a first original drawing object in the image (page 382, 3<sup>rd</sup> paragraph), the envelope being a manipulable graphic object defining a coordinate remapping (page 382, 3<sup>rd</sup> paragraph), the coordinate remapping

being applied to generate a resulting drawing object for any original drawing object contained in the envelope (page 382, 3<sup>rd</sup> paragraph), the first original and its resulting drawing object each being a vector object (page 382, 3<sup>rd</sup> paragraph); determine whether an original curve of the first original drawing object at an original anchor point in the envelope has C1 continuity at the original anchor point and, if it does, preserve the C1 continuity in a resulting curve in the resulting drawing object at a resulting anchor point corresponding to the original anchor point (pages 167-169).

8. As per claim 6, MAYA discloses determine whether the C1 continuity is also C2 continuity at the original anchor point and, if it is, preserve the C2 continuity in the resulting curve at the resulting anchor point (pages 167 - 169 and 381).

9. As per claim 7, MAYA discloses the original anchor point is between two tangent handles; and the continuity is preserved by first storing a continuity state of the original anchor point and the relative position of the original anchor point between the two tangent handles, then remapping the tangent handles in accordance with the envelope, and then relocating the anchor point between the remapped tangent handles in accordance with the stored relative position (pages 382-400).

10. As per claim 8, MAYA discloses receive from a user a precision input signifying how closely an object contained in the envelope will follow the envelope when the corresponding resulting object is generated and, in response, introduce additional control points to the original contained object if necessary to achieve the precision before applying the coordinate remapping (page 382, 3<sup>rd</sup> paragraph).

11. As per claim 9, MAYA discloses determine whether an original curve of the first original drawing object at an original anchor point in the envelope has C1 continuity at the original anchor point and, if it does, preserve the C1 continuity in a resulting curve in the resulting drawing object at a resulting anchor point corresponding to the original anchor point (pages 167-169).

12. As per claim 13, MAYA discloses receive a user input requesting a meridian of constant  $u$  or  $v$  be introduced into the envelope (pages 160-162).

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13. As per claim 14, MAYA discloses receive an input requesting one or more single additional control points localized to portions of the envelope be introduced into the envelope (page 399, fig).
14. As per claim 15, MAYA discloses wherein additional control point is a lattice point having four tangents (page 396 fig d).
15. As per claim 16, MAYA discloses wherein the additional control point is not a lattice point and has two tangents (page 399, fig).
16. As per claim 17, MAYA discloses providing variable precision of distortion by introducing additional control points on one or more original curves of one or more contained objects before coordinate remapping, with a variable frequency of insertion that can be determined by user input (page 382, 3<sup>rd</sup> paragraph).
17. As per claim 18, MAYA discloses providing for selection in a user interface multiple pre-made envelope meshes having interior control points, each rendered as an envelope group into a swatch with interior detail (page 386).
18. As per claim 19, MAYA discloses wherein the swatch has a checkerboard pattern of two or more colors (page 207, fig).
19. As per claim 20, MAYA discloses a display for a user an option to select explicitly a focus for editing operations performed by the user, the focus being selected from a set including at least the envelope and a source shape in the envelope (page 386).
20. As per claim 21, MAYA discloses display for the user an option to hid or lock the envelope or the source shape, wherein an element that is hidden or locked cannot respond when a user clicks at a control point of the element (page 393, bottom).
21. As per claim 22, MAYA discloses wherein the envelope is a mesh (page 382, fig).

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***Allowable Subject Matter***

22. Claims 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Scott Wallace** whose telephone number is **703-605-5163**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at 703-305-9798.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

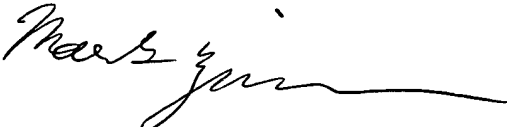
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
**MARK ZIMMERMAN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**